

Al
ent

When the gas-introducing plate 4 lying within the processing chamber of the etching apparatus is used up, the gas-introducing plate 4 becomes thin as shown in Fig. 5. Further, the gas holes 3 defined in the gas-introducing plate 4 reach a given size or more respectively, the following would occur. Plasma enters the backside (cooling plate side) of the gas-introducing plate from the etching-processing chamber 9 through the enlarged gas holes 3. Designated at numeral 10 in Fig. 2 typically illustrates the entrance of the plasma into the backside of the gas-introducing plate 4. When the plasma enters therein, the state of discharge of the plasma on the wafer side becomes unstable. As a result, an etching characteristic is deteriorated and the wafer 8 is unusually processed.

(2.) At page 6, line 19; please replace the paragraph that begins "Fig. 3 shows a processing chamber..." with the following paragraph:

A2

Fig. 3 shows a processing chamber of an etching apparatus according to a first embodiment of the present invention. It is identical in basic configuration to a conventional one. In the conventional etching apparatus, such a device as to detect a plasma was not placed on the backside (on the cooling plate 2 side in Fig. 1) of a gas-introducing plate 4. In the first embodiment, a plasma detector 11 is placed on the backside of the gas-introducing plate 4. A commercially available detector may be used as the plasma detector 11. It is however desirable to use a high-sensitive plasma detector capable of detecting even slight plasma. Further, the plasma detector 11 is placed in a position where it is most easy to detect the plasma.
